



PATENT  
Docket No. 00481.CN1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Benson et al. ) Group Art Unit: 1631

Serial No.: 10/027,277 )

Confirmation No.: 3061 )

Filed: December 21, 2001 )

Examiner: Carolyn L. Smith

For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF  
GLYCOSYLATED HUMAN BETA SECRETASE, AN ENZYME  
IMPLICATED IN ALZHEIMER'S DISEASE

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Prior to taking up the above-identified application for examination, please amend the application as follows:

In the Specification

Please replace the paragraph beginning at page 5, line 5, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate the changes made.

e1 --Figure 2 is the synthetic peptide Ser-Glu-Val-Asn-Sta-Val-Ala-Glu-Phe-Arg-Gly-Gly-Cys (where Sta = statine) (SEQ ID NO:3), PNU-292593E, used for affinity purification of beta secretase.--

Please replace the paragraph beginning at page 33, line 13, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate the changes made.

RECEIVED  
JUN 13 2003  
TECH CENTER 1600/2900

H81C  
Plunkett  
C 7/2/03



PATENT  
Docket No. 00481.CN1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Benson et al.

Group Art Unit: 1631

Serial No.: 10/027,277

Examiner: Carolyn L. Smith

Confirmation No.: 3061

Filed: December 21, 2001

For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF  
GLYCOSYLATED HUMAN BETA SECRETASE, AN ENZYME  
IMPLICATED IN ALZHEIMER'S DISEASE

RECEIVED  
JUN 13 2003  
TECH CENTER 1600/2900

RESPONSE TO RESTRICTION REQUIREMENT

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Restriction Requirement mailed May 12, 2003, Applicants elect, with traverse, Group I (claims 1-18), drawn to a method for crystallizing a human beta secretase molecule or molecular complex. Applicants' Representatives reserve the right to pursue examination of the non-elected claims in continuation or divisional applications. Applicants respectfully request reconsideration of the restrictions in this case and submit that the inventions as claimed can be readily evaluated in one search without placing undue burden on the Examiner.

The Examiner has also required an Election of Species for Group I. In response to the two required Election of Species for Group I, Applicants elect, with traverse, Species E (a salt which is a combination of salts) and Species F (a glycol which is PEG).

In the event that the restriction requirement is reconsidered and Groups II and III are rejoined with elected Group I, the Examiner has required an Election of Species for each of Groups II and III. In response to the single required Election of Species for Group II, Applicants elect, with traverse, Species K (a human beta secretase which is isolated from mammalian cells).

***Response to Restriction Requirement***

Page 2 of 3

*Applicant(s): Benson et al.*

*Serial No.: 10/027,277*

*Confirmation No.: 3061*

*Filed: December 21, 2001*

*For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF GLYCOSYLATED HUMAN BETA SECRETASE, AN ENZYME IMPLICATED IN ALZHEIMER'S DISEASE*

---

In response to the single required Election of Species for Group III, Applicants elect, with traverse, Species M (a cell line which is mammalian). These elections are without traverse only to the extent that it is understood that (a) the requirement will be withdrawn upon the finding of an allowable genus; and (b) any species withdrawn from consideration will be transferred to the elected subject matter unless it is found patentably distinct from the elected or allowed claims. Applicants traverse on the grounds that the generic claim includes sufficiently few species that a search and examination of all the species at one time would not impose a serious burden on the Examiner.

**SEQUENCE LISTING REQUIREMENTS**

The Examiner also alleged that the present application failed to comply with the requirements of 37 C.F.R. §§1.821-1.825. Applicants address the Examiner's allegation in the Preliminary Amendment submitted herewith.

Applicants respectfully request that the objection to the sequence listing requirements be withdrawn.

**CORRECTION OF DRAWINGS**

The Examiner required correction of the drawings as noted in the PTO-948 form. Applicants address the Examiner's requirement for corrected drawings in the Submission of Drawings under 37 C.F.R. §1.85 submitted herewith.

Applicants respectfully request that the objection to the drawings be withdrawn.

**Response to Restriction Requirement**

Page 3 of 3

Applicant(s): *Benson et al.*

Serial No.: 10/027,277

Confirmation No.: 3061

Filed: December 21, 2001

For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF GLYCOSYLATED HUMAN BETA  
SECRETASE, AN ENZYME IMPLICATED IN ALZHEIMER'S DISEASE

**Conclusion**

The Examiner is invited to contact Applicants' Representatives at the below-listed telephone number, if there are any questions regarding this Response to Restriction Requirement or if prosecution of this application may be assisted thereby.

Respectfully submitted for  
**Benson et al.**

By  
Muetting, Raasch & Gebhardt, P.A.  
P.O. Box 581415  
Minneapolis, MN 55458-1415  
Phone: (612)305-1220  
Facsimile: (612)305-1228  
**Customer Number 26813**



**26813**

PATENT TRADEMARK OFFICE

June 11, 2003

Date

By: 

Loren D. Albin  
Reg. No. 37,763  
Direct Dial (612)305-1225

"Express Mail" mailing label number: **EV 073735714 US**

Date of Deposit: **JUNE 11, 2003**

I hereby certify that this paper and/or fee is/are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Name: **SAM HER**